

REMARKS

Claims 1-11 constitute the pending claims in the present application. Claim 3 was withdrawn from consideration. Claim 4 and 10 are canceled. Claims 1, 2, 6, 7, 9 and 11 have been amended.

Applicant note with appreciation the Examiner's conclusion that claim 7 is allowed.

The issues raised by the Examiner in the Office Action are addressed below in the order they appear in the prior Action.

Interview

Applicant thanks the Examiner for the telephonic interview granted on June 6, 2007. Applicant faxed claim text that included four approaches to amending claim 1 and a proposed amendment to claim 10.

Applicant discussed with the Examiner amending the recitation to add that the ball bearings or slugs are located "in the main structure and within" an internal geometry of the trap. Applicant has accordingly amended claims 1, 6, 9, and 11.

Applicant also discussed with the Examiner the incorporation of claim 10 "load force distribution to the main structure and to the trap" into the independent claims 1, 6, 9, and 11. Applicant has amended claim 1, 6, 9, and 11 to recite *a load force distributed to the main structure and to the trap* and canceled claim 10.

Claims

Applicant thanks the Examiner for pointing out informalities in the claims. Applicant has accordingly amended the claims as detailed below.

Claim 1 has been amended to recite “the trigger” instead of “a trigger” in line 8 and “the release pin” instead of “a release pin” in line 9. Claims 1 have also been amended to insert “the” before “one” in line 9.

Claim 2 has been amended to recite “one or more ball bearings” instead of “one or more ball bearing” in line 2.

Claim 6 has been amended to recite “the trigger” instead of “a trigger” in line 10, “the release pin” instead of “a release pin” in line 11, and “the” has been inserted before “one” in line 11.

Claims 7 and 9 have been amended to recite “the trigger” instead of “a trigger” in line 8, “the release pin” instead of “a release pin” in line 9, and “the” has been inserted before “one” in line 10-11.

Claim 11 has been amended to recite “the trigger” instead of “a trigger” in line 8, “the release pin” instead of “a release pin” in line 9, and “the” has been inserted before “one” in line 10.

Claims 1-6, 7, 9, and 11 have been amended to delete the comma before “to” in line 2.

Accordingly, reconsideration and withdrawal of the objections to the claims is respectfully requested.

The Claims Comply with 35 U.S.C. § 112

Rejection of Claim 10 under 35 U.S.C. § 112, second paragraph

Claim 10 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which applicant regards as the invention. Applicant canceled claim 10.

The Claims Comply with 35 U.S.C. § 102

Rejection of Claims under 35 U.S.C. §102(b) (De Pew U.S. Patent No. 3,065,011)

Claim 1, 2, 5, 6, 10, and 11 are rejected under 35 U.S.C. 102(b) as being unpatentable over De Pew (U.S. Patent No. 3,065,011). Applicant traverses this rejection to the extent it is maintained over the claims as amended.

Claim 1 (and by dependency claims 2, 5, 8) recites a low-force release mechanism comprising: a main structure; a trap; a moveable internal spring pin with an internal spring to eliminate ordinal locking of the trap; a release pin; at least one trigger; and attachments by which a container is attached to said main structure and said trap, wherein the release pin is configured to be moveable to effect the position of one or more ball bearings or slugs *located in the main structure and within* an internal geometry of the trap, such that the position of said trap is locked and held; a load force is distributed *to the main structure and to the trap* away from the release pin; the trigger to permit application of a low force to move the release pin; and the one or more ball bearings or slugs interact with the internal geometry of the trap, wherein the one or more ball bearings or slugs retract upon removal of the release pin such that the application of the low force on the trigger causes the internal spring pin and the release pin to move a position of the container. Claim 6 further recites a movable hanger and claim 11 further recites a trap spring.

De Pew discloses a device with two sets of ball bearings 21 and 36 (Figure 1). In neither instance, however, are the ball bearings *located in the main structure and within the internal geometry of the trap*, as recited in the pending claims. Contrary to the ball bearings or slugs recited in the pending claims, the ball bearings 36 are located in the main structure but *external* to the trap 11 and do not lock and hold a position of the trap. Also, contrary to the ball bearings or slugs recited in the pending claims, the ball bearings 36 *retract* in the locking position (see e.g., column 2, line 46-50). And unlike the ball bearings recited in the pending claims, the ball bearings 21 are located *external* to the main structure 10 and do not interact with the main structure to lock and hold a position of the trap 11. Furthermore, the Examiner contends that attachments A15 (actually a

single attachment with a hole through which the trap 11 is inserted) are attached to the main structure 10 and the trap 11. Contrary to the attachments recited in the pending claims that attach to the main structure and the trap, attachment A15 does not make contact with the main structure 10. Furthermore, the Examiner contends that “A load force (the spring 31 applies this load force) is distributed away from the trigger.” (spring 31 should read spring 30 in that 31 refers to a shoulder inside trap 11 (column 2, line 26)). The pending claims recite a load force is distributed *to the main structure and to the trap* away from the release pin and does not claim distribution away from the trigger. Furthermore, the spring 30 located inside the shoulder 31 of the trap 11 and coiled around the release pin 20 does not apply a load force but is used on De Pew’s device to prevent unintended movement of the release pin 20 while in the locked state (reference Figure 1).

Regarding claim 2, see the preceding remarks for claim 1.

Additionally, regarding claim 5, Applicants point out that what the Examiner characterizes as a hanger 13 is a delineated flange (see e.g., column 2, lines 2-4) of the body member 10.

Regarding claim 6, De Pew discloses, in Figure 3, (what the Examiner characterizes as a movable hanger 61) a clevis 61 and lock nut 62 attached to body member 50 by the threaded section 60 (reference column 3, line 46-47). The clevis 61 “to which a tension load may be connected.” (column 3, line 47-48) can not receive force applied by the main structure as a point of external attachment since clevis 61 is never in contact with the main structure 55. Furthermore, in a release state, as in Figure 4, the internal spring pins 56, 57 are held immobile by the body member 50 and the force of the release spring 71. Additionally, any force applied to clevis 61 will either be opposite the direction of a required force to move the internal spring pins 56, 57 or the internal spring pins 56, 57 will be held immobile and unable to be moved by a force applied to the clevis 61. This is contrary to the pending claim that states a movable hanger through which force can be applied to move the position of the internal spring pin or receive force applied by the main structure as a point of external attachment.

Regarding claim 10, Applicant has canceled claim 10.

Regarding claim 11, Applicants point out that what the Examiner characterizes as a trap spring 30 is expanded on De Pew's device when in a lock state (reference Figure 1) and compressed in a released state (reference Figure 2). This is contrary to the trap spring recited in the pending claims, which expands upon the triggering of the device.

Accordingly, De Pew does not teach or suggest all the elements of the pending claims. For the foregoing reasons, Applicant believes that the reference cited by the Examiner does not anticipate the pending claims. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

The Claims Comply with 35 U.S.C. §103

Rejection of Claims under 35 U.S.C. §103(a) (De Pew, U.S. Patent No. 3,065,011 in view of Linder

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Pew, 3,065,011, in view of Linder. Applicant traverses this rejection to the extent it is maintained over the claims as amended.

The Examiner's attention is drawn to MPEP § 706.02(j), which sets forth that a teaching or suggestion provided by the prior art reference (or references when combined) of all the claimed limitations is necessary to establish a *prima facie* case of obviousness. The following comments address this requirement of a rejection under 35 U.S.C. § 103(a).

De Pew is discussed above. Linder discloses only a box. Linder does not describe the use of a bag, a collapsible box, or a net as recited in claim 8.

Linder does not overcome the deficiencies of De Pew discussed above. Accordingly, neither De Pew nor Linder, either alone or in combination, teach or suggest all the elements of the pending claims.

For the foregoing reasons, Applicant believes that the references cited by the Examiner do not render the claimed subject matter *prima facie* obvious under 35 U.S.C. § 103(a). Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of Claims under 35 U.S.C. §103(a) (De Pew, U.S. Patent No. 3,065,011 in view of Huff, U.S. Patent No. 1,027,481)

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over De Pew (U.S. Patent No. 3,065,011) in view of Huff (U.S. Patent No. 1,027,481). Applicant traverses this rejection to the extent it is maintained over the claims as amended.

De Pew is discussed above. Huff discloses the attachment of a cable from a part of the releasing means of a hook (column 2, lines 83-89). Huff does not teach or suggest the attachment of a string to a low-force release mechanism as recited in claim 9.

Huff does not overcome the deficiencies of De Pew discussed above. Accordingly, neither De Pew nor Huff, either alone or in combination, teach or suggest all the elements of the pending claims.

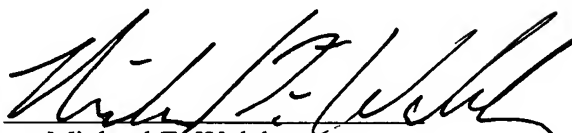
For the foregoing reasons, Applicant believes that the references cited by the Examiner do not render the claimed subject matter *prima facie* obvious under 35 U.S.C. § 103(a). Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, I respectfully requests reconsideration and withdrawal of the pending rejections. I believe that the pending claims are in condition for allowance and favorable reconsideration is respectfully solicited.

Respectfully submitted,

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